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**Joint Subcommittee to Monitor the Implementation of the
West Kowloon Cultural District Project**

**Background brief prepared by the Legislative Council Secretariat
for the meeting on 26 August 2011**

Financial arrangements for the West Kowloon Cultural District project

Purpose

This paper provides background information on the financial arrangements for the development of the West Kowloon Cultural District ("WKCD"), and highlights the concerns of members of the Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project ("the Joint Subcommittee").

Background

Financial approach to WKCD

2. In September 2003, the Government launched an "Invitation for Proposals" ("IFP"), which aimed at generating market-driven private sector financing to take forward the WKCD project. However, owing to diverse views on different aspects of IFP, the Government decided to discontinue the IFP process in February 2006. The Chief Executive subsequently appointed the Consultative Committee on the Core Arts and Cultural Facilities of the West Kowloon Cultural District ("the Consultative Committee") in April 2006 to re-examine the need of the Core Arts and Cultural Facilities ("CACF") for WKCD and the financial implications of developing and operating these facilities. In its Recommendation Report issued in September 2007, the Consultative Committee recommended that CACF would comprise a total of 15 performing arts venues (12 venues for Phase I and three for Phase II), a museum-type cultural institution called M+, an Exhibition Centre and Piazza Areas, as shown in **Appendix I**.

3. The Consultative Committee also considered that none of the CACF would be able to recover the costs of operation and maintenance as well as the capital costs, and recommended the following financial approach to WKCD -

- (a) financing the capital costs of the WKCD project through an upfront endowment appropriated by the Legislative Council ("LegCo") roughly equivalent to the estimated land revenue from the residential, hotel and office part of the commercial sites within WKCD; and
- (b) vesting the retail/dining/entertainment ("RDE") part of the commercial sites in the West Kowloon Cultural District Authority ("WKCDA") to provide a steady source of recurrent income through rental proceeds to meet the operating deficits of CACF.

4. Taking into account the public views received during the public engagement exercise conducted from September to December 2007, the Government adopted the recommendations of the Consultative Committee and would provide WKCDA with an one-off upfront endowment of \$21.6 billion as a long-term commitment to the WKCD development, while the site for residential, hotel and office within WKCD would be disposed of separately by the Government through the normal land disposal mechanism at suitable timing in future. The upfront endowment would cover the capital costs of the components of the WKCD project in **Appendix II**. WKCDA would be required to manage the upfront endowment (including investment of funds) to ensure that there would be sufficient funds to cover the cash flow requirements of the capital costs of the WKCD project.

Monitoring by previous LegCo

5. In view of the Administration's plan to put up a funding proposal to LegCo's Finance Committee ("FC") in mid-2008 for an upfront endowment of \$21.6 billion to be given to WKCDA upon its establishment, the Subcommittee on West Kowloon Cultural District Development ("the Subcommittee") established under the House Committee in the Third LegCo sought the approval of The Legislative Council Commission for the appointment of Versitech Limited (a wholly-owned subsidiary of the University of Hong Kong) as the Specialist Advisor to assist the Subcommittee in examining the financial aspects of the WKCD project.

6. In its Final Report submitted to the Subcommittee in May 2008, the Special Advisor raised a series of questions about the Administration's financial study on the WKCD project, including the estimated escalation of the

construction costs in the short term, level of rental income from RDE facilities, investment return, sustainability of the project after 50 years, the use of "design and build" approach and the mode of operation of M+. The Administration's response to the Special Advisor's Final Report is in **Appendix III**. In July 2008, FC approved the \$21.6 billion upfront endowment.

7. On 4 March 2011, WKCDA announced the selection of City Park designed by Foster & Partners as the preferred Conceptual Plan Option ("CPO") for WKCD. According to the Administration, based on the preferred CPO, a detailed Development Plan ("DP") is expected to be unveiled for public consultation in late September 2011.

Members' concerns

8 The Joint Subcommittee has not discussed the financial arrangements for the WKCD project per se. Nevertheless, members had raised related concerns at various meetings in the context of discussing the selection of CPOs and the latest development of the WKCD project. Their concerns are highlighted in the ensuing paragraphs.

Adequacy of upfront endowment

9. Members expressed concern about the adequacy of the approved \$21.6 billion upfront endowment for the entire WKCD project and its financial sustainability, as Mr Ronald Arculli, member of the WKCDA Board and Chairman of the Development Committee under WKCDA, had told the media that the upfront endowment might be insufficient for the entire WKCD development. Some members recalled that Mrs Carrie YAU, former Permanent Secretary for Home Affairs, had assured members that the Administration would not seek additional funding from LegCo for WKCD other than the \$21.6 billion. They asked whether the assurance would still be valid should the phasing of WKCD proceed as planned, and whether WKCDA had any alternative plan if the WKCD project was overspent.

10. According to WKCDA, with the surging construction costs in recent years, the \$21.6 billion would definitely be insufficient if the construction of all arts and cultural facilities in WKCD commenced immediately. However, during Stage 1 Public Engagement exercise from October 2009 to January 2010, the public had expressed support for such facilities to be developed in phases. The WKCD development should also be flexible to accommodate the possible changing needs and expectations of the stakeholders and society. As the preferred CPO would be further developed into a DP for submission to and

approval by the Town Planning Board, it was difficult to arrive at an accurate cost estimate for the entire WKCD project and assess whether the project would be overspent at the current stage. WKCDA assured members that it would closely monitor the changes in the development cost and formulate appropriate financial arrangements for WKCD based on the finalized DP, the pace of development of CACF, fluctuation in construction prices and inflation, etc. It would also endeavour to contain the total capital costs within the \$21.6 billion, and had no plan to seek additional funding from LegCo.

Transparency of cost estimates

11. Members raised grave concern about the lack of information on the financial implications of the preferred CPO and expressed worry that WKCD would become a white elephant. In view of the public's concern over the possible cost overrun of the WKCD project, they called on the Administration/WKCDA to enhance the transparency of the cost estimates of the project and particularly the financial arrangements for the arts and cultural facilities in each phase of WKCD as soon as possible.

Relevant papers

12. A list of the relevant papers with their hyperlinks on LegCo's website is in **Appendix IV**.

Council Business Division 2
Legislative Council Secretariat
24 August 2011

West Kowloon Cultural District
Details of the Core Arts and Cultural Facilities

(A) Performing Arts Venues:

Category (Phase I)	Seating Capacity	Main Purposes
Mega Performance Venue	15 000 (max.)	Mega events, large scale entertainment shows, pop concerts
A Great Theatre	2 100 to 2 200 (Total: 2 200) (max.)	Suitable for long-run overseas productions, as well as Chinese and Western opera, drama, ballet, modern dance, musical, children's performances etc.
Two Medium-sized Theatres	500 to 800 each (Total: 1 600) (max.)	Drama, musical, dance, suitable for local productions
Four Blackbox Theatres	150 to 250 each (Total: 1 000) (max.)	Experimental/avant-garde performances, budding artists' production, comedy shows, children shows etc.
A Concert Hall	2 000 (max.)	Orchestral music
A Chamber Music Hall	800 (max.)	Chamber music, jazz, piano or violin recital etc.
A Xiqu Centre (performance venue) (small theatre)	1 400 (max.) 400 (max.)	Cantonese opera, other forms of Chinese opera and musical performances
Piazza Areas	at least 30 000 m ²	Mega outdoor events, circus, commercial events, concerts
Category (Phase II)	Seating Capacity	Main Purposes
<ul style="list-style-type: none"> • A Great Theatre • Two Medium- sized Theatres 	1 900 (max.) 800 each (Total:1 600) (max.)	

(B) Museum Facilities and Exhibition Centre:

Category	Area	Concept
<ul style="list-style-type: none"> • A cultural institution with museum functions (temporarily called M+, or Museum Plus) on visual culture of the 20th to 21st century • The initial broad groupings include <ul style="list-style-type: none"> - Design - Moving image - Popular culture - Visual art (cover ink art) 	<p>Gross Floor Area (GFA) – 78 750 m² comprising</p> <p>On site : 61 950 m² Off site : 16 800 m²</p> <p>The development of M+ would be phased – 70% of the on-site GFA (i.e. 43,365 m², giving a net gallery area of 16,000 m²) and all the off-site area (storage and conservation laboratory) are to be provided in the first phase and the remaining 30% on-site GFA (i.e. 18,585 m², giving a net gallery area of 10,000 m²) to be provided in subsequent phase(s)</p>	<p>A forward looking institution, to present visual culture of the 20th and 21st century from a Hong Kong perspective, the perspective of now and with a global vision</p>
<p>An Exhibition Centre</p>	<p>Net Operating Floor Area (NOFA) – 10 000 m² equivalent to a GFA of 12,500 m², using a 1:1.25 NOFA/GFA conversion ratio</p>	<p>A self-financed venue with focus on arts, culture, creative industries and WKCD-related activities</p>

Source: Enclosure 1 to LC Paper No. PWSC(2008-09)31 issued on 18 June 2008

Capital Cost of Component Parts of the West Kowloon Cultural District Project

The \$21.6 billion one-off upfront endowment to the WKCDA would cover the capital costs of the following component parts of the WKCD project –

- (a) planning, design and construction of the following facilities –
 - (i) CACF – which comprise 15 performing arts venues to be developed in two phases (12 venues for Phase I and three venues for Phase II), a cultural institution with museum functions temporarily called **M+** (or Museum Plus)¹, focusing on 20th to 21st century visual culture, an Exhibition Centre with focus on arts and culture and creative industries, and three ha of piazza areas for outdoor performances;
 - (ii) other arts and cultural facilities (OACF) – which include accommodation space for conferences/events, etc., offices and ancillary facilities for arts and cultural organizations/groups, arts and cultural information centre, as well as the WKCDA;
 - (iii) retail, dining and entertainment (RDE) facilities;
 - (iv) transport facilities which include an automated people mover (“APM”) system (or other passenger transportation system) and public car parking facilities;
 - (v) 23 ha public open space including three ha of piazza areas;
- (b) major repair and renovation of the facilities mentioned in (a). These cover periodic major repair and renovation of the facilities mentioned in (a) above at different intervals over the 50-year project period;
- (c) collection, exhibition development, conservation laboratory equipment and library setup for the **M+**,

¹ The **M+** includes the construction and related land acquisition for off-site conservation laboratory and storage facilities.

which cover –

- (i) initial acquisition of collection and annual collection thereafter;
 - (ii) periodic fabrication of the exhibition galleries of the **M+**;
 - (iii) acquisition of conservation laboratory equipment and library setup costs;
- (d) planning of the WKCD and project management which include the following areas –
- (i) preparation of a development plan for the whole WKCD site. The costs include mainly consultancy, technical studies, public consultations and related expenses; and
 - (ii) project management during the planning and construction stage of Phase I (estimated to be seven years from 2008/9 to 2014/15).

The other communal and government facilities and related engineering works, such as roads, drainage, fire station, public pier, etc. which are designed to support the whole WKCD (including residential, commercial and hotel developments) will be undertaken by the Government.

**Final Report of the Specialist Advisor Versitech Ltd.
to the Subcommittee on West Kowloon Cultural District (WKCD) Development
for the Study on the Financial Aspects of the WKCD Project
for the Legislative Council Commission –
Responses from the Government Economist**

The Final Report provided by Versitech Ltd. (“the Report”) made various comments on the Economic Impact Assessment (“EIA”) prepared by the Economic Analysis and Business Facilitation Unit (Section 9 as well as various other paragraphs of the Final Report). Responses from the Government Economist are set out below:

Methodology of estimation (cf. section 9.1, p.41 of the Final Report)

2. The Specialist Advisor suggested that the EIA “must also examine the benefits derived from the alternative uses of the land (i.e. opportunity cost) at the WKCD”. We wish to clarify that the EIA is intended to evaluate the intangible and tangible economic impact brought about by the project on the economy as a whole, which is different from an economic cost-benefit analysis of WKCD as a standalone project. As shown in our EIA report, the development of the West Kowloon Cultural District (WKCD) is expected to bring about not only significant tangible economic impacts to Hong Kong, in terms of value added contributions and employment creation, but also intangible economic impact, as the project serves as an important strategic investment in Hong Kong’s arts and cultural infrastructure that would promote arts and cultural activities and enhance Hong Kong’s status as an international city.

3. From a planning and development perspective, the Government takes into account a wide range of factors, including social aspirations of the community, the holistic developmental needs of Hong Kong, and the spatial distribution of various public facilities such as police stations, schools, parks, etc. As reflected in the public engagement exercise for the WKCD project, the Government received an overwhelming support for the overall vision and strong support for early implementation of the WKCD. Against this backdrop of clear community’s aspiration, it is not meaningful to undertake an assessment of an alternative land use option for the WKCD site. Indeed, it would be wrong to evaluate the cost-benefit of WKCD, (or for that matter other public facilities such as a sports complex or a

university), by evaluating the value of alternative uses of the site.

4. Besides, the Specialist Advisor cast doubt about the scientific basis of the estimated attendance used in both the Financial Advisor (FA)'s assessment and the EIA. As we have explained to the Specialist Advisor, the total attendance deployed in the FA's assessment was compiled on a set of planning parameters, taking into account the objective of developing world-class arts and cultural facilities in the WKCD, local attendance experiences of various facilities in the past from LCSD, and the experiences of various international renowned facilities. All parameters adopted in the assessments are objective and prudent, and went through careful deliberations. In any case, projections about future attendance are NOT an important element in determining the financial viability of WKCD as a whole. Actual attendance in the future will also depend very much on how the future WKCD facilities are managed.

Interpretation of the impact (cf. section 9.2, p.41-42 of the Final Report)

5. The Specialist Advisor opined that "a unique feature that differentiates a 'world-class cultural and arts district' from a pure property development is its benefits to tourism". We have reservations about this opinion. The scope of developing WKCD is far wider than a pure tourism project, as highlighted in the various tangible and intangible benefits mentioned in the EIA report.

Performance indicators (cf. section 9.3, p.42 of the Final Report)

6. As explained above, the EIA intends to assess the potential macroeconomic impact of the project on the economy as a whole. It is not a suitable process used to identify and devise performance indicators on the operational front. The mode of operation of the proposed WKCD Authority will by and large hinge on the respective legislation which governs the overall institutional design of the Authority. The future Management of WKCD should also be given the responsibility to agree with the relevant authorities what performance indicators should be used.

The 2% inflation assumption over a 50-year time horizon (cf. pp.15-17, 19 and 35 of the Final Report)

7. The Specialist Advisor questioned in various parts of the Final Report whether the 2% long-term inflation rate assumption is realistic. It should be noted that inflation assumptions for a 50-year period are subject to much uncertainty. As

an advance economy and under a currency board system with the Hong Kong dollar linked to the US dollar, Hong Kong's inflation over the longer run would be more or less in line with those experienced by economies at a similar stage of development. The implicit or explicit inflation targets set by most major central banks in the advance economies are around 2%. Thus, a long-term inflation rate assumption of 2% is considered acceptable.

8. In any case, the results of the financial analysis done by the financial consultants are not sensitive to inflation assumptions, as both revenues and costs would broadly increase along with the general inflation rate over time. Indeed, the Specialist Advisor also realizes this point, as given in the third paragraph on p.17 of the Final Report, "... instead of inflating prices at 2% per annum, and subsequently discounting them ..., it would be much simpler to use the real rate of interest of 4% per annum to discount future prices".

Economic Analysis and Business Facilitation Unit
Financial Secretary's Office
28 May 2008

Subcommittee on West Kowloon Cultural District Development

Questions raised and information requested by Members at the meeting on 30 May 2008

The Administration's response to questions raised and information requested by Members at the meeting on 30 May 2008 is set out below -

- 1. How could the Administration assure Members that the West Kowloon Cultural District (WKCD) project would not end up as a failure? Could the Administration figure out the "worst scenario" of the WKCD project and provide an estimate on any supplementary funding provision required in such a scenario?**

Administration's response :

- The financing arrangement as proposed by the Government has taken into account the recommendations of the Consultative Committee on the Core Arts and Cultural Facilities of the West Kowloon Cultural District (Consultative Committee) as well as the detailed financial assessment made by the Financial Advisor (FA) on the development and operation of the West Kowloon Cultural District (WKCD).
- The financial assessment has undergone a professional and stringent process. The assessment and its revisions which took 15 months to complete, was examined by the Financial Matters Advisory Group (FMAG) led by the Hon Ronald Arculli. The conclusion was that it is a sustainable financing approach to provide a one-off upfront endowment of \$21.6 billion (in 2008 Net Present Value (NPV)) to finance the capital cost and to use the rental proceeds generated from the retail, dining and entertainment (RDE) facilities in the WKCD to meet the operating deficits of the arts and cultural facilities.
- According to the present assessment, we do not think there are sufficient reasons for a "worst scenario" in which any of the proposed venues may not be constructed as planned. If Members insist in figuring out a "worst scenario", and no additional funding is to be provided, we may come up with an assumption whether Phase II of the project would be delayed

until after 2026-31 because of cash flow difficulties i.e. the 1,900-seat great theatre and the two 800-seat theatres had to be built at a later stage and the expansion of M+ would have to be implemented later.

2. The Administration is requested to conduct further analyses on the investment returns and the inflation of construction costs?

Administration's response :

- When estimating the capital cost, apart from inflation, consideration have also been given in a prudent manner in respect of the indirect costs and the risk premium so as to provide sufficient leeway to accommodate cost increase due to various factors
- Construction costs of the core arts and cultural facilities included a risk premium of 23% to 29% to guard against price hike due to the risks. The risk premium is conventionally set at 10% to 15%. In view that the need for the construction of the venues and other related works to start as soon as possible and other factors may give rise to construction cost fluctuations exceeding the original estimates, a higher risk premium has been included.
- If we reduce the indirect cost and the risk premium to a maximum of 15%, the one off upfront endowment of \$21.6 billion can accommodate an annual nominal increase of 3.4% in construction cost (an accumulative increase of 31%) between 2007-2014. If we have to support an annual nominal 6% increase in construction cost (an accumulative increase of about 60%) between 2007-14, the one-off upfront endowment has to be increased to \$25.0 billion (the impact of different growth rates of construction cost on the upfront endowment is set out in **Annex 1**). The latter's assumption of an accumulative increase of about 60% is not realistic.
- Details of the construction cost of the various facilities in WKCD are at **Annex 2**.

- 3. As returns from retail, dining and entertainment facilities make up the lifeline of WKCD, the Administration is requested to provide more details of these facilities such as their layouts, settings, anticipated pedestrian flow, business plans and measures to enhance the viability of these facilities. The Administration should also advise on its plans to strengthen WKCD's connectivity with neighbouring areas.**

Administration's response :

- In the process of consultation on the WKCD project, the public has expressed the view that they were concerned about the connectivity of the WKCD with its neighbouring areas. The preparation of the development plan (DP) for the WKCD is the foremost task of the West Kowloon Cultural District Authority (WKCDA). The WKCDA and the Planning Department in coordination with the WKCD Office which will be set up soon, will work to ensure early formulation of plans to connect the WKCD and its neighbouring areas.
 - Regarding the details of the RDE mentioned by Members, we need to point out that these facilities will take up a gross floor area of about 119,000 sq. m., and according to our present planning, the development and operation of these facilities are not comparable to large scale shopping malls. Instead, the facilities will be scattered throughout the WKCD to integrate with the arts and cultural facilities, so as to create synergy and bring about increase in people flow to keep the district in vibrancy at all times. Thus, the rental level is pitched at a rather conservative level i.e. monthly rental of \$30 per sq. ft. Gross Floor Area (at 2006 prices), which is more conservative when comparing to the rental of other districts in Hong Kong (see Annex 3).
- 4. Will the Administration consider seeking funding approval only for the Phase I development of WKCD at this stage and conduct a thorough review before moving onto Phase II to ascertain whether any adjustment in the scale of the project is required?**

Administration's response :

- According to the FA's assessment, the recommended one-off upfront endowment and the arrangement to cover operating deficits of arts and cultural facilities by rental proceeds from retail, dining and entertainment facilities would be sufficient for the development and sustainable operation of the facilities in phase I and phase II of WKCD. We have no intention to change the plan.
 - The facilities in Phase II are estimated to be completed between 2026-2031, we believe that the WKCDA will certainly conduct a thorough review on the development of WKCD before moving onto Phase II.
- 5. The current estimates are worked out by assuming that the "design and build" approach will be adopted for the arts and cultural facilities. Will the Administration consider adopting other approaches such as drawing up the detailed design first and then tender out the construction works under a separate contract for certain facilities such as the M+ and the major performance venues? What will be the impact on the estimated funding requirement if the latter approach is adopted?**

Administration's response :

- The WKCDA will look into different modes of Public Private Partnership (PPP) in the development and operation of the arts and cultural facilities with reference to their distinctive features. We would like to point out that the FA has examined the PPP mode in detail in respect of the operation of the arts and cultural facilities with reference to oversea examples. The FA recommended the design and build model, because the private sector does not express much interest in life-cycle public private sector partnership covering construction, operation and maintenance stages in view of the construction and operation risks involved.
- Even if the design and building of the facilities are included in

two independent contracts, the FA's estimated construction costs have already included a considerable amount of indirect costs and risk premium to accommodate increase in costs due to various factors.

6. Will the Administration give second thoughts to engaging an international operator to operate M+?

Administration's response :

- The proposal of commissioning an international operator to operate M+ was not made by the Consultative Committee. Such arrangement is no different from allowing a foreign institution to have complete control of the operation and curatorial work of M+, and restrict cooperation between M+ and other world-class museums in the future. As such, we do not think that commissioning an international single operator to operate M+ will be supported by the cultural sector. However, upon its establishment, M+ can cooperate with world-class museums in the Mainland or abroad. Moreover, the cost of commissioning an international operator could possibly be higher than expected.

7. On what basis does the Administration consider that the provision of \$1,214 million (covering \$1 billion initial collection cost and an annual collection budget of \$20 million) is enough for acquiring collections of world standards?

Administration's response :

- Leisure and Cultural Services Department's museums currently possess over 60,000 items of visual culture collection. The collection could not be all displayed due to inadequate venue space. Besides, world famous museums have quite often exhibited their collections in Hong Kong (for example the recent Treasures of the World's Cultures from the British Museum).
- Like other world-class institutions on visual culture around the world, M+ will not establish its own position solely by its

collection. **M+** is itself an innovation. Its curatorial concepts are very different from those of the traditional museums. It is a new platform to incorporate many themes. With a forward-looking, flexible and responsive approach, **M+** encourages collaboration, interaction and cross-discipline ideas. Community participation is essential to breathing life and energy into **M+**. It is under an open-ended format that encourages partnership, interaction and cross-fertilisation of ideas—with the general public, sector professionals and experts worldwide.

- Around one-third of the annual estimated expenditure (around \$100 million) of **M+** would be used to commission artists for creative art works.

8. Is it possible to further downsize **M+?**

Administration's response :

- The scale of the **M+** originally recommended by the Museums Advisory Group (MAG) was bigger than that of some of the world-renowned museums. After consulting the MAG and the Financial Matters Advisory Group, the Consultative Committee decided to reduce the scale of **M+** by 30%. It would be necessary to conduct a new round of consultation before a decision can be made to further downsize **M+**. Nevertheless, Members are advised to note that we adopt a step by step approach in the development of **M+**, with 70% of the reduced area to be developed in the first phase and the remaining 30% in the second phase. The scale of **M+** is still comparable to the scale of world-renowned museums. Further downsizing the **M+**, however, will hinder the development of **M+** into a world-class contemporary cultural and arts institution. **M+** will also not be able to realize its vision.

9. The Administration is requested to illustrate the ideas/concepts for **M+ using concrete local and/or overseas examples. The Administration is also requested to make use of the existing museum facilities and collections on visual culture to**

demonstrate to the public on what M+ is like?

Administration's response :

- The existing museum facilities cannot be compared with M+. Their curatorial concepts and directions are also different from those of M+. The effect will not be good if we make use of these facilities to demonstrate the innovative approach of M+ in the display of visual culture. It may also mislead the public in forming an opinion and impression of M+. Hence, we are not inclined to adopt this approach to illustrate M+.
- We are happy to use concrete examples to illustrate the ideas and concepts for M+, such as using visual representations as far as possible, so that the LegCo and the public will have a better understanding of M+'s future operation.
- The construction costs and operating assumptions of M+ and their comparison with local and overseas museums are set out at **Annex 4** for Members' reference.

10. The Administration should explain how the costs for major renovation or reconstruction of the aged buildings in WKCD would be financed after 50 years.

Administration's response :

- The Government's Financial Adviser used a 50-year period for the assessment of the WKCD. It is even more stringent than that used for the professional assessment of other long-term development projects. In the financial analysis, provision has already been made for regular major overhaul and annual maintenance during the 50-year period. All facilities will be in good condition and fully functional beyond 50 years, requiring no immediate allocation of additional funds for demolition, reconstruction or major renovation beyond that period.

Results of Further Sensitivity Tests, in 2008 Net Present Value (NPV)

<u>Assumptions</u>	
i) <u>On-costs</u> : decrease to a maximum of 15% for CACF	
ii) <u>Risk assessment</u> : 15% for CACF and 10% for other items	
	<u>Total Capital Cost</u>
<u>Construction cost nominal escalation rate:</u>	\$ billion
(a) 6% every year from 2007 to 2014 (8 years) (i.e. a cumulative nominal increase of 59%), thereafter 2% p.a.	25.0
(b) 5% every year from 2007 to 2014 (8 years) (i.e. a cumulative nominal increase of 48%), thereafter 2% p.a.	23.6
(c) 4% every year from 2007 to 2014 (8 years) (i.e. a cumulative nominal increase of 37%), thereafter 2% p.a.	22.3
(d) 3.4% every year from 2007 to 2014 (8 years) (i.e. a cumulative nominal increase of 31%), thereafter 2% p.a.	21.6

Note:

The above are merely tests to consider the impact of applying different construction cost escalation rates on the upfront endowment of \$21.6 billion (in 2008 NPV). The Financial Advisor, GHK (Hong Kong) Ltd., considers that assuming construction costs to escalate continuously with no correction in the medium to long term is not realistic given the historical construction cost cycle.

West Kowloon Cultural District
 Details of Construction Costs (in 2006 Prices)

	(a)		(b)		(c) = (a) x (b)		(d)		(e) = (c) x (d)		(f)	(g) = (e) x (f) x 0.000001				(h)	(i) = (g) x (h)	(j)	(k) [(j) x (k)]			(m)	(n) = (j) + (j) x (m)		(o)	(p) = (n) x (o)	(q) = (n) + (p)
	Floor Area				Initial Construction Cost (Note 4)								Professional Fees and Contract Management Costs (Note 5)			Other Costs	Total Construction Cost (before risk premium)	Construction Risk Premium (Note 6)		Risk Adjusted Total Construction Cost							
	Net Operating Floor Area (NOFA)	NOFA to GFA	Gross Floor Area (GFA)	GFA to CFA	Construction Floor Area (CFA) (Note 2)	Unit Construction Cost	Breakdown of Unit Construction Cost			Unused Construction Cost	Construction Period	Inflation Adjustment	Adjusted Total Construction Cost	Professional Fees	Contract Management Costs			Total	\$ Million (in 2006 prices) (Note 1)		\$ Million (in 2006 prices) (Note 1)	\$ Million (in 2006 prices) (Note 1)	%	\$ Million (in 2006 prices) (Note 1)	%	\$ Million (in 2006 prices) (Note 1)	
sq m	ratio (1 to x)	sq m	ratio (1 to x)	sq m	\$/sq m CFA (in 2006 prices)	\$ per sq.m. (in 2006 prices)	\$ per sq.m. (in 2006 prices)	\$ per sq.m. (in 2006 prices)	\$ per sq.m. (in 2006 prices)	\$ Million (in 2006 prices) (Note 1)	No of Years	Index (rounded to 2 decimal points)	\$ Million (in 2006 prices) (Note 1)	%	%	\$ Million (in 2006 prices) (Note 1)	\$ Million (in 2006 prices) (Note 1)	\$ Million (in 2006 prices) (Note 1)	%	\$ Million (in 2006 prices) (Note 1)	%	\$ Million (in 2006 prices) (Note 1)					
PHASE 1																											
2 Museum and Exhibition Space																											
2.1 Museum (Phase 1)																											
M+	28,910	1.5	43,365	1.3	56,375	24,200	4,200	14,000	6,000	1,364	5	0.96	1,313	11.1%	9.0%	264	73 (Land Cost)	1,576	29.2%	460	2,037						
Off-site storage and conservation laboratory	14,000	1.2	16,800	1.2	20,160	15,000	2,000	8,000	5,000	302	5	0.96	291	11.1%	9.0%	58		422	29.2%	123	545						
2.2 Exhibition Centre																											
	10,000	1.25	12,500	1.3	16,250	22,200	4,200	12,600	5,400	361	4	0.97	351	9.0%	8.0%	60	410	23.0%	94	606							
3 Performing Arts Facilities																											
3.1 Mega Performance Venue																											
	36,710	1.4	51,394	1.3	66,812	26,200	4,200	14,300	7,700	1,750	5	0.96	1,684	12.0%	8.0%	337	2,021	23.0%	465	2,486							
3.2 Great Theatre 1																											
	14,800	1.4	20,720	1.3	28,936	29,200	4,200	16,250	8,750	787	5	0.96	767	12.0%	8.0%	151	908	23.0%	208	1,117							
3.3 Concert Hall and Chamber Music Hall																											
	16,800	1.4	23,520	1.3	30,576	29,200	4,200	16,250	8,750	893	5	0.96	859	14.6%	9.0%	203	1,042	29.2%	310	1,372							
3.4 Xiqu Centre																											
	14,955	1.4	20,937	1.3	27,218	27,200	4,200	14,950	8,050	740	5	0.96	712	14.1%	9.0%	185	877	29.2%	256	1,133							
3.5 Medium Theatre 1																											
	6,750	1.4	9,450	1.3	12,285	27,200	4,200	14,950	8,050	334	4	0.97	325	12.0%	8.0%	65	390	23.0%	90	479							
3.6 Medium Theatre 2 and Black Box Theatre 1																											
	9,480	1.4	13,272	1.3	17,254	26,200	4,200	14,300	7,700	452	5	0.96	435	12.0%	8.0%	87	522	23.0%	120	642							
3.7 Black Box Theatres 2 and 3																											
	5,195	1.4	7,273	1.3	9,455	22,200	4,200	11,700	6,300	210	4	0.97	204	12.0%	8.0%	41	245	23.0%	56	301							
3.8 Black Box Theatre 4																											
	3,160	1.4	4,424	1.3	5,751	22,200	4,200	11,700	6,300	128	4	0.97	124	12.0%	8.0%	25	149	23.0%	34	183							
3.9 Piazzas																											
					30,000	5,600				165	4	0.97	160	8.5%	8.0%	23	184	23.0%	42	226							
					10,000	6,000				60	4	0.97	58	6.5%	8.0%	8	67	23.0%	15	82							
4 Other Arts and Cultural Uses																											
			15,000	1.3	19,500	14,200	4,200	10,000		277	4	0.97	269	6.2%	8.0%	38	307	15.0%	48	353							
5 Transport Facilities																											
5.1 Automated People Mover																											
										504	4	0.97	490	5.8%	11.0%	82	572	15.0%	86	658							
5.2 Car parks																											
					9,528	11,200				107	4	0.97	104	3.0%	8.0%	11	115	15.0%	17	132							
					19,958	4,000				80	4	0.97	78	3.0%	8.0%	8	86	15.0%	13	99							
					15,876	7,000				111	4	0.97	106	3.0%	8.0%	12	120	15.0%	18	138							
6 Communal Facilities																											
6.1 Public Open Space																											
					170,000	3,500				595	4	0.97	578	2.1%	8.0%	58	636	15.0%	95	732							
					50,000	4,500				225	4	0.97	219	2.1%	8.0%	22	241	15.0%	36	277							
			3,340	1.0	3,340	2,000				7	4	0.97	6	2.1%	8.0%	1	7	15.0%	1	8							
7 Retail/Dining/Entertainment																											
													2,232	6.0%		134	2,366	15.0%		335	2,700						
PHASE 2																											
8 Performing Arts (Phase 2)																											
8.1 Great Theatre 2 and Medium Theatre 3																											
	20,325	1.4	28,455	1.3	36,992	29,200	4,200	16,250	8,750	1,080	5	0.96	1,039	12.0%	8.0%	208	1,247	23.0%	287	1,534							
8.2 Medium Theatre 4																											
	6,750	1.4	9,450	1.3	12,285	27,200	4,200	14,950	8,050	334	4	0.97	325	12.0%	8.0%	65	390	23.0%	90	479							
9 Museum and Exhibition (Phase 2)																											
9.0 M+ (Phase 2)																											
	12,390	1.5	18,585	1.3	24,161	22,200	4,200	14,000	4,000	536	4	0.97	521	11.1%	9.0%	105	626	23.0%	144	770							

Note: (1) Figure in 2006 prices, rounded to nearest \$ million.
 (2) Refers to floor area for piazzas and public open space.
 (3) Breakdown of RDE construction costs:

	Area (GFA)	Unit Cost (in 2006 prices)	Cost (\$M) (in 2006 prices)
Shops	119,000 sq.m.	\$18,196 / sq.m.	2,166
Car Parking (Podium)	298 spaces	\$140,000 / space	42
Car Parking (Basement)	99 spaces	\$245,000 / space	24
		Sub Total	2,232
Professional Fees (5%)		\$2,232 million x 0.05	134
Contingency (15%)		\$2,232 million x 0.15	335
		Total Construction Cost	2,700

(4) Please refer to Annexes C (M+ and Exhibition Centre), D (performing arts venues, piazzas and small canopy), E (APM and public car parks) and F (other arts and cultural facilities, and public open space) in the Financial Advisor's Final Report dated April 2007 for the unit construction costs / construction costs of respective facilities adopted.

(5) Annex G of Financial Advisor's Final Report dated April 2007 refers

(6) Annex J of Financial Advisor's Final Report dated April 2007 refers

(7) Annex L of Financial Advisor's Final Report dated April 2007 refers

Rental of Retailing, Dining and Entertainment Facilities

Local Comparators

	Monthly rental per sq. ft Gross Floor Area (at 2006 prices)
West Kowloon Cultural District	\$30
Local References :	
(1) Prime and Secondary Shopping Malls (Langham Place, IFC, Plaza Hollywood, Olympian City, etc.)	\$27-\$42
(2) Soho (Central)	\$50-\$80

Note : The above figures are provided by the Government's Financial Advisor, GHK(Hong Kong) Ltd.

M+	Phase 1	Phase 2	Phases 1 and 2 Combined	Local / International References
1 Physical Parameters				
A free standing structure with iconic architecture. M+ should meet international standards on climate controls and security. A collecting institution, with appropriate storage facilities, conservation laboratories and staffing, and can manage artefact collections representing the full range of materials. Temporary exhibition galleries large enough for M+ to accept most major travelling shows from important museums around the world and to store exhibits to be put on display.				
(a) <u>On-site floor area</u>				
On-site Gross Floor Area (GFA)	43,365 sq.m.	18,585 sq.m.	61,950 sq.m.	
<u>Including:</u>				
Net Exhibition Area	16,000 sq.m.	10,000 sq.m.	26,000 sq.m.	
(b) <u>Off-site floor area</u>				
Off-site Storage and Conservation Laboratory (GFA)	16,800 sq.m.	- sq.m.	16,800 sq.m.	
Total floor area (on-site and off-site)	60,165 sq. m.	18,585 sq. m.	78,750 sq. m.	Centre Pompidou, Paris - 112,523 sq. m. MOMA, New York - 73,420 sq. m. Tate Modern - 43,000 sq. m.
2 Key Development Assumptions				
(a) Construction is to take place during	Phase 1	Phase 2		
(b) Design and construction	5 years (including 1 year for an architectural design competition by invitation)	3 years		
(c) Target opening	2015	2031		
3 Total Capital Costs (\$Million in 2008 Net Present Value (NPV))				
(a) Design, planning and construction costs	2,215 \$Million in 2008 NPV	346 \$Million in 2008 NPV	2,561 \$Million in 2008 NPV	
<u>Base cost estimate = Construction floor area X unit construction cost \$ (at 2006 prices) per CFA X (1 + on-cost %) X (1 + risk premium %)</u>				
(a) <u>On-site</u>				
(i) Construction floor area (CFA) (assumed GFA: CFA = 1:1.3)	56,375 sq. m.	24,161 sq. m.	80,535 sq. m.	
(ii) Unit construction cost	24,200 \$ (at 2006 prices)	22,200 \$ (at 2006 prices)	- \$ (at 2006 prices)	Range of comparables - HK\$14,300 (Jewish Museum, Berlin) to HK\$41,100 (MOMA, New York) equivalent per sq. m. CFA.
(iii) On-costs (i.e. professional fees + contract management costs)	20.1 % (i.e. 11.1% professional fees + 9% contract management costs)	20.1 % (i.e. 11.1% professional fees + 9% contract management costs)	- %	
(iv) Risk premium assessed	29.2 %	23.0 %	- %	Standard approach - a fixed percentage of 15%
(This is arrived at based on a more sophisticated estimate of contingencies than the simple/standard approach of adding a fixed percentage to the base cost estimate)				
(b) <u>Off-site</u>				
(i) CFA (assumed GFA:CFA = 1:1.2)	20,160 sq. m.	- sq. m.	20,160 sq. m.	
(ii) Unit construction cost	15,000 \$ (at 2006 prices)	- \$ (at 2006 prices)	- \$ (at 2006 prices)	
(iii) On-costs (i.e. professional fees + contract management costs)	20.1 % (i.e. 11.1% professional fees + 9% contract management costs)	- %	- %	
(iv) Risk premium assessed	29.2 %	- %	- %	
(b) Other capital costs	1,630 \$Million in 2008 NPV	87 \$Million in 2008 NPV	1,717 \$Million in 2008 NPV	
<u>Breakdown</u>				
(i) Collection	1,214 \$Million in 2008 NPV	-	1,214 \$Million in 2008 NPV	Very difficult to make comparisons and initial collections need to be built up over long periods. Donations, exhibit loans, partnership arrangements are important as well. Range of comparables on annual acquisition - HK\$11 million (MOMA, San Francisco) to HK\$ 774 million (The Metropolitan Museum of Art, New York) equivalent.
(M+ needs to build up sizable and impressive collections commensurating with M+'s status and attributes. The total collection cost covers an initial collection of \$1 Billion (at 2006 prices) upon commissioning of the Phase 1 M+ and an annual collection budget of \$20 Million (at 2006 prices) thereafter.				
(ii) Exhibition Development	352 \$Million in 2008 NPV	87 \$Million in 2008 NPV	439 \$Million in 2008 NPV	
(iii) Conservation Laboratory Equipment	41 \$Million in 2008 NPV	- \$Million in 2008 NPV	41 \$Million in 2008 NPV	
(iv) Library set-up	24 \$Million in 2008 NPV	- \$Million in 2008 NPV	24 \$Million in 2008 NPV	
(c) Major Repair and Renovation Costs - once every 20 years	421 \$Million in 2008 NPV	50 \$Million in 2008 NPV	471 \$Million in 2008 NPV	
(d) Total Capital Costs	4,266 \$Million in 2008 NPV	483 \$Million in 2008 NPV	4,749 \$Million in 2008 NPV	

M+	Phase 1	Phase 2	Phases 1 and 2 Combined	Local / International References
4 Total Operating Deficit over the 50-year Project Period to 2059 (\$Million in 2008 NPV)	5,292 \$Million in 2008 NPV	625 \$Million in 2008 NPV	5,917 \$Million in 2008 NPV	
	(The operating deficits of arts and cultural facilities of the WKCD (including that for the M+) over the 50-year project period to 2059 will be fully covered by the estimated rental income generated from retail/dining/entertainment facilities, with an estimated safety margin of about 10%.)			
5 Key Operating Assumptions				
(a) Initial Broad Groupings will be Design, Moving Image, Popular Culture and Visual Art (cover Ink Art). M+ will build a world-class collection relating to each of the four broad groupings. M+ will offer a range of local, regional and international exhibitions and a full range of quality public and educational programmes as per international museum practice. All exhibitions and programmes will be to international standards.				
(b) Operator	Not for Profit Operator	-	Not for Profit Operator	
(c) Attendance	1,200,000 visitors	-	2,000,000 visitors	Range of comparables - 0.8 million (MOMA, San Francisco) to 6.4 million (Tate Gallery (Tate Modern, Tate Britain, Tate Liverpool and Tate St Ives)).
(d) Number of Blockbuster Exhibitions	4 per year	-	7 per year	
(e) Average Admission Fee from Visitors	27.5 \$ per visitor (at 2006 prices)	-	30 \$ per visitor (at 2006 prices)	HK Museum of Art / HK Heritage Museum - \$10 (with premium for blockbuster shows \$10 - \$30) Centre Pompidou - HK\$103 equivalent Guggenheim, New York - HK\$137 equivalent
	(The assumption about ticket prices which includes concessions and blockbusters has been compiled with regard to the recommendations of the Museums Advisory Group (MAG) of the Consultative Committee on the operational requirements of the M+, and admission charges of existing Government museums in Hong Kong. Specifically, MAG required M+ to be affordable to the general public in Hong Kong.)			
(f) Full time equivalent (FTE) employees	320 number	-	336 number	Lower than staffing requirements at international comparable museums: New York MOMA (GFA 73,420 sq. m.) - 590 full-time staff; Centre Pompidou (GFA 112,523 sq. m.) - 918 permanent staff. Range of comparables - 95 (The Solomon R. Guggenheim Museum in New York, Guggenheim Hermitage Museum in Las Vegas and Peggy Guggenheim Collection in Venice) to 1,783 (The Metropolitan Museum of Art, New York) full time staff.
	(employment of temporary staff is covered in annual operating budget)			
6 Snapshot of the Annual Operating Result at Year 5 after commencement of operation (i.e. 2019 for Phase I) when cost and revenues have settled down into their long term trend				
(a) Operational Revenue	67 \$Million (at 2006 prices)	-	105 \$Million (at 2006 prices)	
(b) Operational Expenditure & Adjustments	370 \$Million (at 2006 prices)	-	488 \$Million (at 2006 prices)	Range of comparables on annual operating costs - HK\$ 249 million (MOMA, San Francisco) to HK\$2,132 million (The Metropolitan Museum of Art, New York) equivalent.
(c) Annual Operational Surplus / (Deficit)	<u>(303) \$Million (at 2006 prices)</u>	-	<u>(383) \$Million (at 2006 prices)</u>	
Indicative Operational Cost Recovery Rate	<u>18%</u>	-	<u>22%</u>	For the 4 comparable LCSD museums (i.e. Museum of Art, Museum of History, Heritage Museum and Science Museum, with an aggregate total GFA 80,530 sq. m.), their total revenue collected and total operating cost (excl. depreciation and collection) incurred in 2006-07 were HK\$16,301,205 and HK\$329,206,459 respectively, and the cost recovery rate was 5%. Cost recovery rates for comparable overseas museums: Centre Pompidou - 27%; Tate Galleries - 54%; New York MOMA - 57%; Guggenheim Museums - 66%.

Note: All numbers are rounded to 0 decimal places for presentational ease. The table totals presented therefore may not add up due to rounding.

Source: Enclosure 12 & 13 to LC Paper No.PWSC (2008-09)31 issued on 18 June 2008

**Relevant documents on
Financial arrangements for the West Kowloon Cultural District project**

Committee	Date of meeting	Documents/Papers
Subcommittee on West Kowloon Cultural District Development	4.2.2005	Agenda Minutes
	26.5.2008	Agenda Minutes
	30.5.2008	Agenda Minutes
	5.6.2008	Agenda Minutes
Public Works Subcommittee of the Finance Committee	18.6.2008	Agenda Minutes
Joint Subcommittee to Monitor the Implementation of the West Kowloon Cultural District Project	27.2.2009	Agenda Minutes

Council Business Division 2

Legislative Council Secretariat

24 August 2011